Fire Detection Control Panel

BC600-16L8S

- **Modular structure with flexible expandability**
- **Plug-in slots for 16 function modules**
- **Intelligent ring-bus technology with 3 different loop protocols or conventional technology**
- **Clear display and operating field with intuitive, menu-driven operation**
- **With 8.5 A power unit and central processor**
- **4 expansion fields in the case front**

The Fire Detection Control Panel BC600-16 with its modular structure can be individually adapted to the requirements of the system. The control panel can be easily expanded later, which makes the control panel a future-proof investment.
The control panel has 16 mounting positions for the installation of function modules – for example, loop interfaces or conventional detector interfaces. Therefore, up to 16 loops with selectable loop protocol, a maximum of 128 detector lines in conventional technology or a combination thereof can be connected to the BC600-16. If extension housings are used, the control panel can serve up to 54 function modules – including a maximum of 20 loop interfaces. As a result, you get the highest flexibility, even with larger fire detection systems.
The Series BC600's intelligent loops offer ring-bus technology with bi-directional digital data traffic. Each loop provides for the software-aided administration of up to 318 physical address points in a maximum of 200 detector zones. Conventional technology allows the connection of automatic fire detectors, manual call points and contact detectors.
At the front of the housing of the BC600-16, there are 4 expansion fields for the installation of additional devices such as an LED display field, an LED button field, an event printer or an authorization lock. When the control panel is expanded, this not only saves space but also reduces the costs for auxiliary case, mounting and cabling.
The easy parameterisation by means of the PC software PARSOFT allows you to optimally adapt the control panel to your individual requirements in a time-saving way. AUTO-setup facilitates the parameterisation through automatic detection and presetting of componentries and loop elements.

The Fire Detection Control Panel BC600-16L8S comprises a wall-mount cabinet with a display and operating field, a Power Supply NT608-1 with an output current of 8.5 A, a Backplane BPL610-1 with 8 free mounting positions, a Central Processing Board ZTB600-1 as well as a Module Carrier BGT600-1. At the bottom of the cabinet, there is space for stand-by batteries with 2 × 12 V/max. 45 Ah.

COMPONENTS AND FUNCTIONS IN DETAIL

The Fire Detection Control Panel BC600-16 has been designed for use in medium-sized and larger systems. Depending on its configuration, it provides the following features:

- The wall-mount cabinet offers 16 mounting positions for function modules. The function modules are designed as plug-in units and are connected via a powerful bus system.
- Detectors and modules in intelligent loop technology with bi-directional data traffic can be connected to the Loop Interface LIF601-1. Each loop interface can be parameterised for use with the Labor Strauss protocol,

the System Sensor protocol or the Apollo protocol. In this way, fire detection systems with different detector systems can also be realised easily.
The maximum loop current of 500 mA allows connection of numerous components with increased current demand. The loop analysis functions of the BC600 make commissioning and maintenance of the loop easier and facilitate troubleshooting.

- The Conventional Detector Interface GIF608-1 permits the connection of automatic detectors and manual call points in conventional technology as well as special detectors with contact output.
- The Fire Brigade Interface FWI601-1 is used for the line-monitored connection of an independent transmitting device for a direct interconnection to a designated alarm respondent – for example, the fire brigade – as well as for the connection of a country-specific fire brigade control unit.
- Two monitored siren outputs, three dry relay contacts, 8 open-collector outputs and 3 inputs are standard.
- Thanks to the "hot plug & play" function, componentries can be inserted or removed without switching off the power supply. This does not interrupt the ongoing operation of the system. The central processor automatically detects a newly inserted componentry and puts it into operation immediately.
- Pluggable terminals on all componentries facilitate the installation and the exchange of componentries and avoid wiring faults.
- The BC600-16 can manage up to 4000 detector zones, 2000 actuations or alarming devices as well as 9 transmitting devices.
- Freely parameterisable outputs and logical combinations of detectors and detector zones for the activation of external actuations and alarming devices facilitate maximum flexibility. Thus, no additional expenses arise for external relays, logic gates or timers. Thanks to the wide range of parameterisation possibilities, individual requirements even of complex applications can be combined into a reasonable fire protection strategy.
- The free combination of detectors and modules into logic sectors allows the joint operation of defined parts of the system even beyond loop limits. The BC600-16 can manage up to 256 sectors.
- The use of unshielded loop cables allows for cost-saving and uncomplicated installation as well as for the possibility of reusing the existing cabling.
- The BC600-16's compatibility with older generations of LST fire detection control panels facilitates the replacement of installed control panels. An existing detector installation in conventional or loop technology can be used without having to change it.
- In the event of a failure of the central processing board or a function module, the diversified redundancy concept ensures reliable alarm recognition. In addition, hardware redundant versions of the most important componentries can be used. As a result, the control panel meets even the highest demands on failure safety.
- The processor-monitored power unit ensures permanent monitoring and charging of the batteries. In this way, the undisturbed and uninterrupted operation is ensured even in the event of a mains failure.
- The parameter data are conveniently created or edited by means of the PC software PARSOFT. Via a USB interface, the parameterisation is transferred from the PC to the control panel or read out from the control panel. By means of PARSOFT, the control panel firmware can be upgraded easily and quickly.
- AUTO-setup facilitates parameterisation when the control panel is first put into operation or expanded and thus helps to save time.

The practically oriented structure of the wall-mount cabinet allows easy mounting and time-saving cabling of the control panel. Thanks to its modern, ageless design, architectural requirements and demands of the respective regulations are ideally combined. In addition to the central processing board and the function modules, the housing can also accommodate auxiliary modules and batteries. The BC600-16 thus stands for modularity and easy expansion.
The Fire Detection Control Panels Series BC600 comply with all relevant standards of EN 54 and have been tested by VdS. LST's high quality level is secured by a permanently monitored quality management system certified according to ISO 9001.

EVENT INDICATION AND OPERATION

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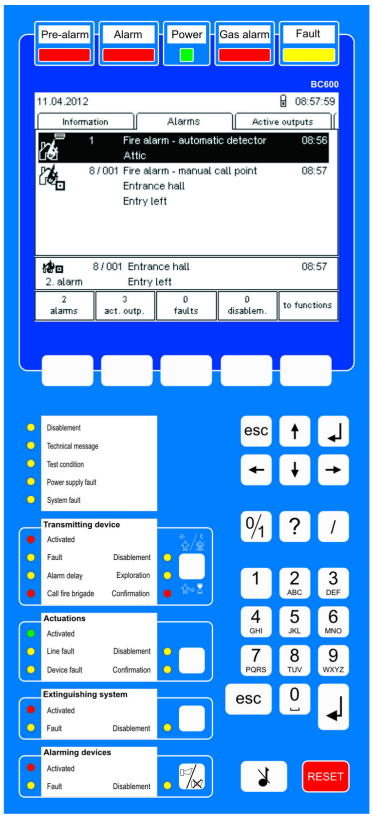
The large 5.7" 1/4 VGA graphics display indicates all current events of the system. The events are sorted and listed in 6 menu windows according to the type of message. Additional graphic symbols next to each event, parameterisable additional information such as the name of the room or a plan number as well as date and time of the event allow quick and targeted reaction in case of emergency. The switching between overview and detailed mode additionally improves the readability of the messages.

An event memory allows for the display of the latest 10,000 events at any time, including all required information. Thus, all system conditions and user operations that occurred are documented in a clearly laid out way.

The fire detection system is easily operated menu-driven via the operating field of the control panel. A clear menu structure and situation-dependent function keys facilitate the user guidance in the event of an alarm, in the normal condition as well as during commissioning or maintenance. As a result, the training costs are reduced to a minimum.

In the lowest line of the display, counters of the most important events as well as the current assignment of the function keys are indicated.

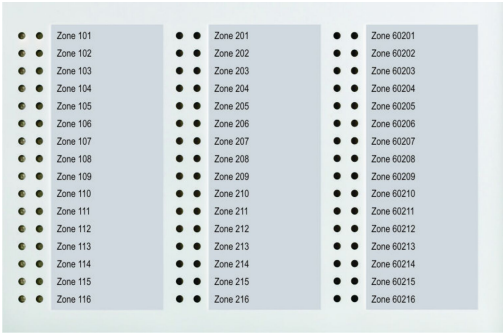
Three hierarchised authorization levels for operation and parameterisation facilitate a high degree of security against unauthorized access. An extensive user rights management allows the definition of individual access rights for up to 256 different users in 32 user groups.



EXPANSION FIELDS

In the front of the housing of the Fire Detection Control Panel BC600-16, there are 4 mounting spaces for expansions. Additional devices such as

- an LED display field,
- an LED button field,
- a fire brigade control unit,
- a panel-mount printer or
- an authorization lock



can be easily integrated into the control panel, thereby ensuring space-saving and orderly arrangement without external cabling. The additional devices are parameterised together with the control panel by means of the PC software PARSOFT.

Control panel network net600

In order to build large or far-flung systems, up to 127 Control Panels Series BC600 can be connected together in a large-scale control panel BCnet600, via the ring-shaped security network net600. The maximum size of a BCnet600 comprises 20,000 detector zones as well as 9,700 output functions – actuations, alarming devices and transmitting devices.

SYSTEM COMPONENTS

A variety of compatible system devices can be connected to the Fire Detection Control Panel BC600-16:

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- acoustic and optical signalling devices,
- actuations,
- fire brigade control units,
- fire brigade key safes,
- remote display and operating panels,
- remote indication units,
- external protocol printers,
- electronic operation control systems,
- transmitting devices for the actuation of pagers via ESPA protocol,
- modules for remote access via computer network or mobile phone connection
- transmitter modules for the transmission of messages via SMS or e-mail,

– and much more.

TECHNICAL DATA

Mains voltage	230 VAC +10/-20 %, 47 - 63 Hz
Connected load	260 VA
Output current power supply	8.5 A
Output current siren outputs	1 A
Output voltage typ.	27.6 VDC
Protection class	IP30
Ambient temperature	from -20 °C to 60 °C
RAL colour	grey white, RAL 9002
Dimensions W × H × D	480 × 670 × 201 mm
Weight (without batteries)	12.1 kg
Approval number CPR	0786-CPR-21611

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Approval number VdS	G 212164
Article number	211247
Order reference	Fire Detection Control Panel BC600-16L8S

ACCESSORIES

Article number	Order reference
211110	Loop Interface LIF601-1
211190	Loop Interface LIF601-2
211112	Conventional Detector Interface GIF608-1
211113	Fire Brigade Interface FWI600-1
211122	Network Interface NIF600-1
211143	Relay Module RL608-1
211151	Backplane BPL608-1
211371	Surface Mounting Frame AMR600-16
222004	Relay Module RL58-1
222010	Relay Module RL58-2
223026	Siren Connection Module SZ58-3
310004	Standby Battery 12V/45Ah
219019	Lock for BC600 SCHLOSS-BC600-1